#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002888 Address: 333 Burma Road **Date Inspected:** 13-Jun-2008

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 1930 **OSM Departure Time:** 2300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

Chen Chih-Ming / Chen Xi **CWI Name: CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG side, bottom and deck panels

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

NOTE: due to high winds ZPMC ferry was canceled today. QA had to utilize the public ferry and did not arrive to Changxing Island until 19:30 hrs.

#### OBG new assembly bay 2

QA performed 10% verification Ultrasonic Testing (UT) on the following Complete Joint Penetration (CJP) welds: SEG-016B-A welds 027, 036, 013 and 011. All four welds appeared to be compliant with AWS D1.5 2002 and the contract documents. QA noted on the same segment mentioned above that ZPMC has rejected the following CJP welds: 038, 028, 039, 001 and 002. QA also noted on the following welds same segment mentioned above ZPMC did not indicate whether or not the welds were UT accepted or rejected: 037, 010 and 012. QC and QA were unable to UT the following CJP welds on the same segment mentioned above due to insufficient scanning distance: 025, 026, 051 and 052.

QA noted that there was no welding being performed in this bay during the time that QA was present.

Other general observations include ZPMC personnel grinding side and bottom panels and weld bevel prep.

OBG Bay 1

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

QA observed ZPMC personnel fitting U-Ribs to deck plate DP-599-001.

QA observed ZPMC personnel fitting U-Ribs to PMT panels.

QA noted that ZPMC has finished welding u-ribs to deck plates on the following deck panels: DP-546-001 on gantry 1 and DP-561-001 on gantry 2.

QA noted that the following deck panels are ready to have u-ribs welded to the deck plates: DP-586-001 gantry 1 and DP-579-001 gantry 2.

QA noted that there was no welding being performed in this bay during the time that QA was present.

Other general observations by QA were as follows:

QA observed ZPMC has approximately 45 workers performing various functions relative to the fabrication of the OBG Deck Panels. These functions include; closed rib press forming, hole drilling at ends of U-Ribs using a drill template, PJP bevel preparation, closed rib splice FCAW welding, closed rib diaphragm fit-up and FCAW welding, closed rib to deck plate fit-up and tack welding.

## **Summary of Conversations:**

Only general conversations were held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowry (858)-344-2712, who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer